YouTube Video Trends History Analysis

Herbert Gerlitz
12/07/2021
Automation Project Presentation for Practicum100

Table of Contents

- Page 1: Problem Statement
- Page 2: Information about The Data
- Page 3: General Conclusions
- Page 4: Videos count per day broken down by video categories
- Page 5: Daily percentage category ratio of videos count
- Page 6: Percentage ratios of videos count by regions
- Page 7: Videos count colored relative to the count per region
- Page 8: Recommendations

Problem Statement

- We analyse video history trends on YouTube for improving the decision-making processes of the marketing department of Sterling & Draper.
- We created a daily updated interactive dashboard that helps answering the following three questions:
 - 1) What video categories were trending last week?
 - 2) How were they distributed among various regions?
 - 3) What categories were especially popular in the United States?

(Link to Tableau Dashboard here)

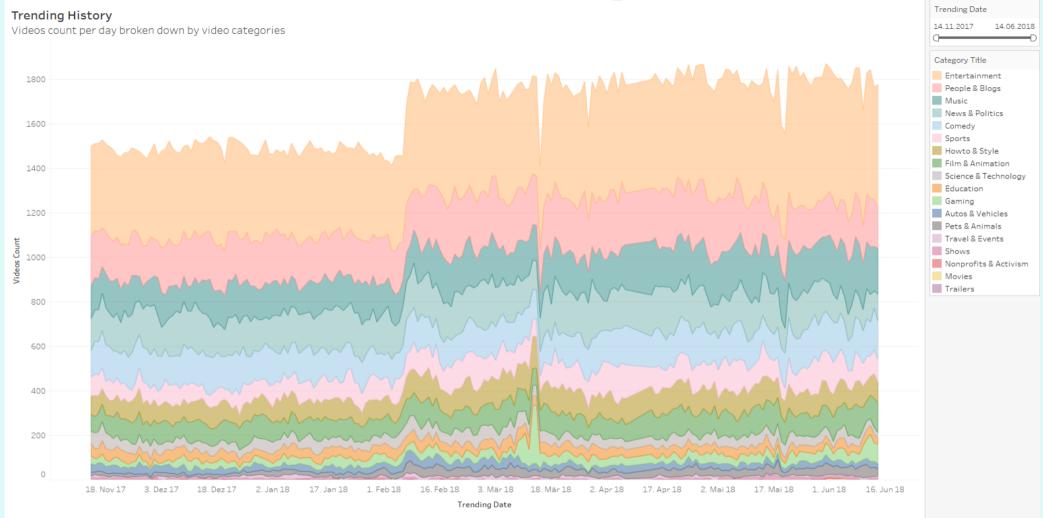
Information about The Data

- The Sterling & Draper advertising agency provided us data about YouTube videos counts; for every video count we know:
 - The date of trending
 - The region where the videos trended
 - The category of the videos
- The covered dates ranges between the 14th of November 2017 and the 14th of June 2018; this corresponds to a time period of **7 months**.
- The data covers **5 regions**: Japan, India, Russia, United States and France.
- The data covers **18 categories** (Entertainment, People & Blogs, Music, ...).

General Conclusions

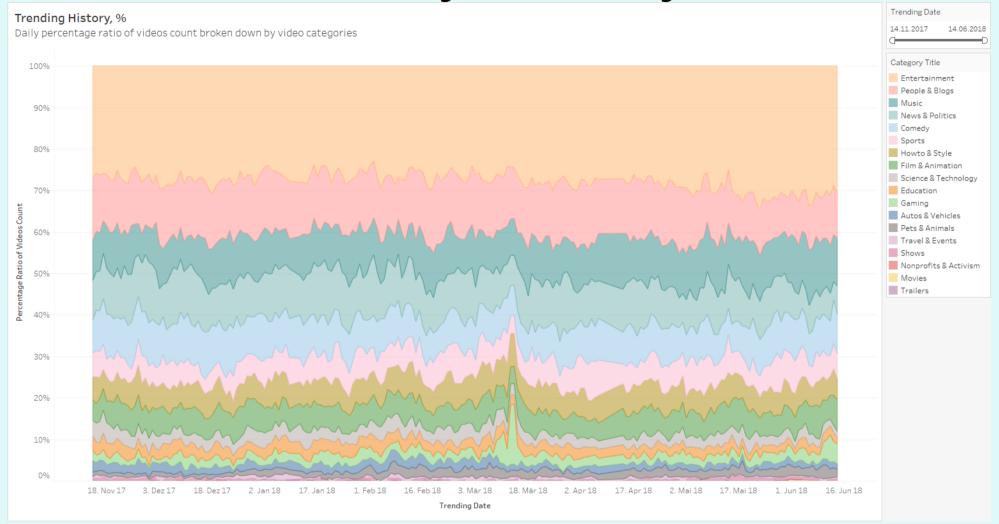
- The video categories trending most often are 'Entertainment', 'People & Blogs',
 'Music' and 'News & Politics'; 'Entertaiment' is a clear leader in trends.
- The category 'Entertainment' shows a slight increase in number of trending videos within the last two months (April to June).
- The regions United States, France, Russia and India have approximatelly the same amount of trending videos in comparison to Japan.
- For all regions except Russia, the category 'Entertainment' is most often in the trends.
- The region with the most trending 'Entertainment' videos is India; the same is given for 'People & Blogs' in Russia and 'Music' in the United States.
- The region with the most trending 'News & Politics' videos is India and there it is the second most popular category.
- In the United States, the second biggest trending category is 'Music' and the third biggest one is 'Howto & Style'; for other regions the latter category is less popular.

The categories 'Entertainment', 'People & Blogs', 'Music' and 'News & Politics' are trending most often.



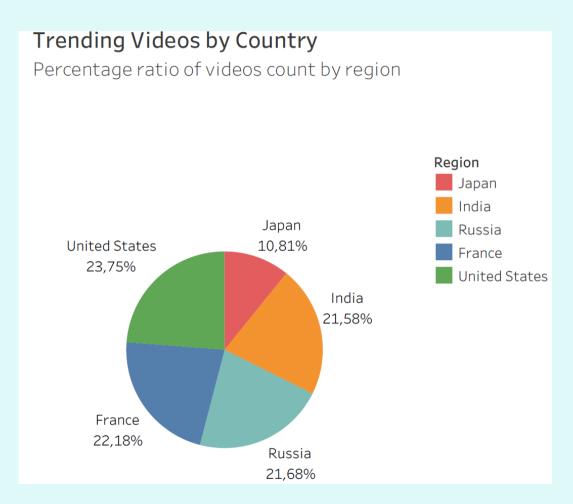
- In general, we count more trend videos starting at February 2018.
- Most often the category 'Entertainment' counts the most trending videos.
- The categories 'People & Blogs', 'Music' and 'News & Politics' trend very often.

The category 'Entertainment' shows a slight increase in trends and there are moments of raising trends for 'Gaming' videos.



- There is a slightly raise for the Entertainment ratio from 25% to around 30% while the People & Blogs ratio has a slightly decreasing trend.
- Around the 18th of March there is a peak for the Gaming category reaching a ratio up to approximately 15%. This category shows an increase around the 16th of June.

Within the observed time period, the regions United States, France, Russia and India have approximatelly the same amount of trending videos.



- The most trending videos are from the United States having a ratio of 23.75%.
- The differences in percentage for the regions United States, France, Russia and India are very low, reaching values between 21.58% and 23.75%.
- With a big distance from all other regions, Japan only has 10.81% of all trending videos.

The three most popular categories have clearly a prefered region; the United States has an exceptional big ratio for the category 'Howto & Style'.

Trending Videos by Country and Category

Videos count colored relative to the count per region.

	Region				
	United	_			5 .
Category Title	States	France	India	Japan	Russia
Entertainment	19.638	19.020	32.924	11.734	11.692
People & Blogs	6.122	9.346	4.988	5.792	18.452
Music	12.874	7.658	7.714	2.480	3.664
News & Politics	4.818	6.526	10.346	2.654	9.858
Comedy	6.870	8.446	6.814	1.372	5.968
Sports	4.250	8.002	1.424	3.606	3.684
Howto & Style	8.280	4.668	1.674	1.574	3.928
Film & Animation	4.680	3.768	3.298	2.140	5.676
Science & Technology	4.722	1.588	1.096	300	2.226
Education	3.284	1.480	2.360	212	1.326
Gaming	1.606	2.786	132	1.834	2.050
Autos & Vehicles	758	1.220	138	538	3.116
Pets & Animals	1.832	468	6	2.250	1.154
Travel & Events	804	204	16	276	510
Shows	114	198	410		388
Nonprofits & Activism	106				
Movies		22	32		2
Trailers		4			

- For all regions except Russia, the category 'Entertainment' is most often in the trends.
- The region with the most trending 'Entertainment' videos is India; the same is given for 'People & Blogs' in Russia and 'Music' in the United States.
- The region with the most trending 'News & Politics' videos is India and there it is the second most popular category.
- In the United States, the third biggest trending category is 'Howto & Style'; for other regions this category is less popular.

Recommendations

- Since the 'Entertaiment' category is a clear leader in the trends, we recommend to invest around one third of the ad planning expenses to that category. Another third of these expenses should flow into the categories 'People & Blogs', 'Music' and 'News & Politics'.
- The regional differences in leading categories should be considered: The focus should be on the category 'People & Blogs' for the Russia and the focus on 'Music' should be bigger for the United States compared to other regions.
- We recommend to focus mainly on the region France since there the share of trending videos is the highest per population size.